

REMARKS/ARGUMENTS

In response to the Office Action mailed November 15, 2006, Applicants amend their application and request reconsideration. Claim 2 is cancelled and new claims 13-16 are added so that claims 1 and 3 are now pending.

In this Amendment examined claims 1 and 2 are combined and a further limitation is added. The added limitation is supported in the original patent application at page 15, lines 4-13. The amended claim 1 corresponds to an allowed claim of the corresponding Japanese patent application. This amendment requires a change in the dependency of claim 10. The amendments to claims 6 and 12 are strictly concerned with formality issues and are not substantive.

New claims 13-16 are supported by the application as filed, and particularly by amended claims 1 and 10.

Examined claims 1-12 were rejected as allegedly anticipated by Oldfield et al. (EP 0622729, hereinafter "Oldfield"). This rejection is respectfully traversed.

Oldfield fails to teach each limitation of independent claim 1, particularly as presented here.

In the invention as defined by claim 1, even before the foregoing amendment the composite display part includes a plurality of states. In computer science and automata theory, a state may be considered a point in some space that includes all possible states. A simple example is a light that is either on or off. In computing and related fields, states, such as in the foregoing example, are often modeled as being discrete, rather than being continuous, and a transition from one state to another state is considered to be instantaneous.

In the invention as defined by claim 1, the composite display part has a plurality of states. In each of the states, behaviors concerning a display and a state transition are described. By contrast, the display part of Oldfield has only a single

state so that the display part of Oldfield is different from and cannot anticipate the display part of claim 1.

As described in the patent application at page 8, lines 25-30, there is a display part that is displayed in each of the states of the composite display part. In addition, an event handler is set up in each state of the composite display part. The event handler prescribes how each type of event is to be handled. As a result of the event processing, by the event handler, the composite display part makes a transition in states as described at page 12, lines 2-25, of the patent application. In accordance with a state transition, the event handler and the display part to be displayed are changed as described in the patent application at page 12, line 32 through page 13, line 7, at page 13, line 13, through page 14, line 8, and page 14, lines 9-30. Since Oldfield fails to disclose these features of the invention, it cannot anticipate claim 1 or any of claims 3-12.

Likewise, Oldfield cannot anticipate the rejected claims because it does not describe the state set editing means of those claims. In the present invention, the state set editing means adds and deletes at least one of a plurality of states of the composite display part. By contrast, in Oldfield the display part has a single state so that the single state cannot be added or deleted.

Further, the event handling editing means of the rejected claims is not described nor suggested by Oldfield. Again, since Oldfield has a display part with a single state, there is no event handling editing means for editing event handling in *each* state of the display part. The interface design apparatus of Oldfield does not contain any means for editing the handling of events. Instead, event handling is left to the applications that eventually use the generated interface.

To better understand the foregoing point, consider Oldfield at page 18, lines 41-47. "Each application controls the display and appearance of their user interfaces by issuing commands... . The sequence by which the UIS commands are issued by the application...determine which application functions will respond to user generated events." Thus, it is the application, and not the interface editor, that specifies event

handling. See also Figure 2a of Oldfield, showing that distinction is made between the Applications (50, 53, 54) and the Interface Editor (49). If there is any remaining question regarding the fact that the Interface Editor of Oldfield *does not supply event handling editing capability*, consider Oldfield at page 21, lines 22-25: "Thus far the user has been in the interface design mode...[However, i]n test mode the *default mechanisms associated with mouse actions apply*." Thus Oldfield makes clear that Oldfield's user interface mode did *not* allow the user to set event handling options, so that default handling mechanisms must be used.

Further, Oldfield does not describe nor suggest the state display editing means of the claimed invention. The state display editing means adds and deletes elementary display parts to be displayed in each of the states of the composite display parts. Oldfield, on the other hand, employing a display part with a single state, cannot have a display part added or deleted in *each* of the states of the composite display parts.

In summary, in the invention, three distinct editing means, i.e., the state set editing means, the event handling editing means, and the state display editing means, are used to design the composite display part having a plurality of states. Therefore, in the present invention, a user interface in which display parts are switched in a complicated way, according to state transitions with respect to events, can easily be designed.

As previously described, amended claim 1 includes the limitation of examined claim 2 and also specifies that the state display editing means hierarchically combines the composite display parts. This combination is achieved by adding and deleting elementary display parts in each of the states of the composite display part as well as adding and deleting another composite display part in each of the states of the composite display part. As shown in Figure 2 of the patent application and described in the first full paragraph at page 15 of the patent application, even a complex user interface involving partially independent state transitions can be designed for substantial clarity by combining hierarchically a plurality of composite display parts

designed by the very same user interface designing apparatus. At the same time, combinatorial explosion that might otherwise occur is prevented.

In the invention as described in amended claim 1, since the composite display parts are hierarchically combined and stored in the composite display part storing means, the composite display parts can be hierarchically described. This hierarchical description is defined by the state display editing means which adds another composite part in some states of the composite display part so that the composite display part is hierarchically defined. For example, when the composite display part Z, shown to the extreme right in Figure 2, is designed, if the composite display part Z is simply added to the state M of the composite display part Y, the elementary display parts H-K can be defined with respect to each of the states 1-N. In the invention, since the composite display parts are hierarchically combined, the composite display parts can be defined *en bloc*. The result is a substantial reduction in the time required for designing, an advantage that cannot be achieved by Oldfield.

Further, in the invention, a composite display part which is produced by hierarchically combining composite display parts can be added to another composite display part. For example, referring again to Figure 2, when the composite display part Y is only added to the state 2 of the composite display part X, the elementary display parts E-K can be defined in the state.

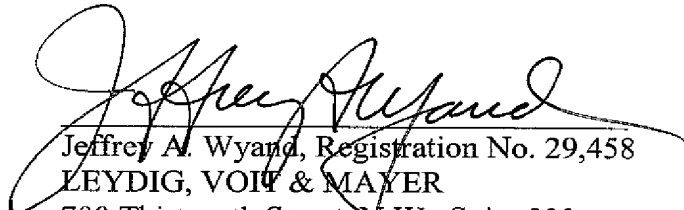
Moreover, since the composite display parts are hierarchically combined, each of them can be edited in an arbitrary stage of the hierarchy by deleting some composite display part in some state of some stage and substituting, by adding, another composite display part. Referencing Figure 2, if the composite display part Z is deleted from the state M of the composite display part Y, and a new composite display part ZZ is added as a substitute, the composite display part Z is automatically changed to the composite display part ZZ. Again, this example demonstrates that the design process can be substantially shortened.

Because of the numerous significant differences between the invention as defined in the pending claims and Oldfield, allowance of claim 1, and dependent claims 3-12, is respectfully requested.

Claim 1 contains limitations drafted in means-plus-function format pursuant to 35 USC 112, paragraph 6 ("state set editing means"; "event handling editing means"; "elementary display part storing means"; "state display editing means"; and "composite display part storing means"). Accordingly, MPEP 2181 expressly requires that the claim either be treated according to 35 USC 112, paragraph six, or that detailed reasons be given as to why limitations that are drafted according to 35 USC 112, paragraph six were not treated as means-plus-function limitations. (*"If a claim limitation does include the phrase 'means for' ... but the examiner determines that either the second prong or the third prong of the 3-prong analysis is not met, then in these situations, the examiner must include a statement in the Office action explaining the reasons why a claim limitation which uses the phrase 'means for' or 'step for' is not being treated under 35 USC 112, sixth paragraph."*). Thus, the claims either must be treated according to 35 USC 112, paragraph six, or a detailed analysis must be provided as to why the Examiner feels that treatment is not applicable. Thus, if the present rejections are maintained, Applicants respectfully request compliance with MPEP 2181 in the next action.

Prompt issuance of a Notice of Allowance for claims 1 and 3-16 is earnestly solicited.

Respectfully submitted,


Jeffrey A. Wyand, Registration No. 29,458
LEYDIG, VOIT & MAYER
700 Thirteenth Street, N.W., Suite 300
Washington, DC 20005-3960
(202) 737-6770 (telephone)
(202) 737-6776 (facsimile)

Date:

March 28, 2007